

## **REMARKS**

The Office Action mailed August 18, 2009 has been received and reviewed. Claims 1-25 and 27-32 are pending in the subject application. Claims 1-25 and 27-32 have been amended as hereinabove set forth. Reconsideration of the present application in view of the above amendments and following remarks is respectfully requested.

### **Rejections based on 35 U.S.C. § 101**

Claims 1-20 have been rejected under 35 U.S.C. § 101 on the grounds that the claimed invention, which the Office Action has interpreted to be computer program, does not fall within at least one of the four statutory categories of invention enumerated by 35 U.S.C. § 101.

Independent claim 1 has been amended herein to recite, in pertinent part, “[a] computing device . . . comprising: a system bus; a communication connection . . . a processor . . . and a system memory.” The invention recited in amended independent claim 1 is a device (i.e., an apparatus) with physical structure (e.g., “a system bus,” “a communication connection,” “a processor,” and “a system memory”).

Accordingly, the invention recited in amended independent claim 1 falls within one of the four statutory categories of invention. 35 U.S.C. § 101. Moreover, Applicants respectfully note that amended independent claim 1 recites statutory subject matter regardless of whether the claim includes claim limitations that the Office may interpret to be a computer program. MPEP § 2106.01(I) (stating that “[w]hen a computer program is recited in conjunction with a physical structure, such as a computer memory, USPTO personnel should treat the claim as a product claim”).

Each of claims 2-14 depends, either directly or indirectly, from amended independent claim 1. Furthermore, each of claims 2-14 has been amended herein to recite, in

part, “[t]he device of claim . . . .” Accordingly, Applicants respectfully submit that these dependent claims recite patentable subject matter under 35 U.S.C. § 101, at least by reason of their dependency from amended independent claim 1. Therefore, Applicants respectfully request withdrawal of the 35 U.S.C. § 101 rejections of claims 1-14.

Independent claim 15 has been amended herein to recite, in pertinent part, “[a] computing device . . . comprising: a system bus; a communication connection . . . a processor . . . and a system memory.” The invention recited in amended independent claim 15 is a device (i.e., an apparatus) with physical structure (e.g., “a system bus,” “a communication connection,” “a processor,” and “a system memory”).

Accordingly, the invention recited in amended independent claim 15 falls within one of the four statutory categories of invention. 35 U.S.C. § 101. Moreover, Applicants respectfully note that amended independent claim 15 recites statutory subject matter regardless of whether the claim includes claim limitations that the Office may interpret to be a computer program. MPEP § 2106.01(I) (stating that “[w]hen a computer program is recited in conjunction with a physical structure, such as a computer memory, USPTO personnel should treat the claim as a product claim”).

Each of claims 16-20 depends, either directly or indirectly, from amended independent claim 15. Accordingly, Applicants respectfully submit that these dependent claims, each of which recites “[t]he device,” are patentable under 35 U.S.C. § 101 at least by reason of their dependency from amended independent claim 15. Therefore, Applicants respectfully request withdrawal of the 35 U.S.C. § 101 rejections of claims 15-20.

Claims 21-25 and 27-32 have been rejected under 35 U.S.C. § 101 on the grounds that the claimed invention is not directed to statutory subject matter.

Independent claim 21 has been amended herein to recite, in part, “[o]ne or more computer storage media having computer-executable instructions embodied thereon for performing a method of facilitating aesthetically improving paid inclusion listings while maintaining ordering rights, the method comprising: receiving a search request from a user . . . identifying a plurality of search results . . . determining the type of display device associated with the user’s computing device . . . retrieving user preferences from a database; modifying the at least one paid inclusion listing . . . and rendering the plurality of search results for display on the user’s display device . . . .” The claimed subject matter in amended independent claim 21 includes a computer program (e.g., a data structure) embodied on one or more computer-readable media.

Accordingly, the invention recited in amended independent claim 21 falls within one of the four statutory categories of invention. 35 U.S.C. § 101; MPEP § 2106.01(I) (explaining that “a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure’s functionality to be realized, and is thus statutory” and that “only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory”).

Each of claims 22-25 and 27-30 depends, either directly or indirectly, from amended independent claim 21. Accordingly, Applicants respectfully submit that these dependent claims, each of which recites “[t]he media,” recite patentable subject matter under 35 U.S.C. § 101 at least by reason of their dependency from amended independent claim 21.

Therefore, Applicants respectfully request withdrawal of the 35 U.S.C. § 101 rejections of claims 21-25 and 27-30.

Independent claim 31 has been amended herein to recite, in pertinent part, “[o]ne or more computer storage media having computer-executable instructions embodied thereon for performing a method of facilitating optimizing enhanced listing performance, the method comprising: generating an enhancement component matrix . . . providing the enhancement component matrix to a paid inclusion customer; receiving a first enhancement selection from the paid inclusion customer . . . receiving a plurality of search queries from a plurality of users; generating a plurality of search results . . . enhancing the first paid inclusion listing . . . enhancing the second paid inclusion listing . . . providing each of the plurality of search results to a corresponding user; monitoring each user’s behavior with respect to the corresponding search results to develop user historical data; and reporting data and inferences associated with the user historical data . . . .” The claimed subject matter in amended independent claim 31 includes a computer program (e.g., a data structure) embodied on one or more computer-readable media.

Accordingly, the invention recited in amended independent claim 31 falls within one of the four statutory categories of invention. 35 U.S.C. § 101; MPEP § 2106.01(I) (explaining that “a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure’s functionality to be realized, and is thus statutory” and that “only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory”).

Claim 32 depends directly from amended independent claim 31. Accordingly, Applicants respectfully submit that claim 32, which recites “[t]he media,” recites patentable subject matter under 35 U.S.C. § 101 at least by reason of its dependency from amended independent claim 31. Therefore, Applicants respectfully request withdrawal of the 35 U.S.C. § 101 rejections of claims 31 and 32.

### **Rejections based on 35 U.S.C. § 103**

#### **A. Applicable Authority**

To sustain a rejection of a claim under 35 U.S.C. § 103(a), the Examiner must find that a preponderance of the evidence supports a finding of obviousness. “In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious.” MPEP § 2141.02(I) (citing *StratoFlex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983)). “All words in a claim must be considered in judging the patentability of that claim against the prior art.” MPEP § 2143.03 (quoting *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (C.C.P.A. 1970)). Moreover, if an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. MPEP § 2143.03 (citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)).

The key to supporting any rejection under 35 U.S.C. § 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. MPEP § 2142, citing *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (U.S. 2007), which notes that the analysis supporting a rejection under 35 U.S.C. § 103 should be made explicit. Moreover, the Federal Circuit has stated that “rejections on obviousness cannot be sustained with mere conclusory statements;

instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." MPEP § 2142 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). See also *KSR*, 127 S. Ct. at 1741 (quoting Federal Circuit statement with approval).

B. 35 U.S.C. § 103(a) Rejection Based upon Rodriguez in view of Wen

Claims 1, 2, 4, 11-15, 19-21 and 23-25 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rodriguez, U.S. Publication No. 2004/0059720 (hereinafter "Rodriguez") in view of Wen, U.S. Publication 2001/0047297 (hereinafter "Wen").

Independent claim 1, as amended herein, recites in part, "a listing control component that controls operation of the enhancement controller component, wherein the listing control component analyzes input from a user and input from the paid inclusion customer to further optimize a value of the paid inclusion listing, and further wherein the listing control component assigns weights to the user and to the paid inclusion customer to optimize the value of the paid inclusion listing." Applicants are unable to find any disclosure in Rodriguez of analyzing user and customer input to optimize a value of the paid inclusion listing or of assigning weights to the user and customer to optimize that value.

To the contrary, Rodriguez describes a search system in which "clients can control how their Web sites are classified for the purposes of a search" and, in which "users can control what categories they wish to see and how they want the search results to be presented." *Rodriguez*, ¶ [0049]. The system disclosed in Rodriguez does not include analyzing the preferences of the clients and the users to balance their preferences by assigning weights to the parties. Rather, the system in Rodriguez allows clients to control one aspect of the experience (i.e., classification of their Web sites) and users to control a wholly different aspect of the search experience (i.e., which categories are presented and how the results are presented). Accordingly,

there is no need for balancing the interests of the two parties in the Rodriguez system because the scope of control of each party does not overlap the scope of control of the other. Furthermore, Wen neither cures the deficiencies of Rodriguez in this regard, nor is relied upon by the Office Action as doing so.

Accordingly, it is respectfully submitted that, for at least the above-cited reasons, Rodriguez and Wen, whether taken alone or in combination, fail to teach or suggest all of the limitations of amended independent claim 1. Thus, Applicants respectfully submit that the asserted combination of references fails to render amended independent claim 1 obvious. Each of claims 2, 4, and 11-14 depends, either directly or indirectly, from amended independent claim 1. Accordingly, it is respectfully submitted that the cited art of record fails to render obvious these dependent claims for at least the above-cited reasons. “If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious.” MPEP § 2143.03, citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Applicants respectfully submit that claims 1, 2, 4, and 11-14 are patentable over the cited art of record and request withdrawal of the 35 U.S.C. § 103(a) rejections thereof.

Independent claim 15, as amended herein, recites in part, “wherein the listing control component utilizes artificial intelligence to assign one or more weights to the user and to assign one or more weights to the paid inclusion customer.” As discussed above with respect to amended independent claim 1, Applicants are unable to find any disclosure in Rodriguez of assigning weights to the user and customer for optimizing enhancement selection. Consequently, Applicants are unable to find any disclosure in Rodriguez of utilizing artificial intelligence to assign those weights. Moreover, Wen neither cures the deficiencies of Rodriguez in this regard, nor is relied upon by the Office Action as doing so.

Accordingly, it is respectfully submitted that, for at least the above-cited reasons, Rodriguez and Wen, whether taken alone or in combination, fail to teach or suggest all of the limitations of amended independent claim 15. Thus, Applicants respectfully submit that the asserted combination of references fails to render amended independent claim 15 obvious. Each of claims 19 and 20 depends, either directly or indirectly, from amended independent claim 15. Accordingly, it is respectfully submitted that the cited art of record fails to render obvious these dependent claims for at least the above-cited reasons. “If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious.” MPEP § 2143.03, citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Applicants respectfully submit that claims 15, 19, and 20 are patentable over the cited art of record and request withdrawal of the 35 U.S.C. § 103(a) rejections thereof.

Independent claim 21, as amended herein, recites in part, “determining the type of display device associated with the user’s computing device, thereby identifying display constraints associated with the user’s display device [and] rendering the plurality of search results for display on the user’s display device based in part upon the display constraints associated with the user’s display device.” Applicants are unable to find any disclosure in Rodriguez of determining the type of display device associated with a user’s computing device and rendering search results based on display constraints associated with that display device. Moreover, Wen neither cures the deficiencies of Rodriguez in this regard, nor is relied upon by the Office Action as doing so.

Accordingly, it is respectfully submitted that, for at least the above-cited reasons, Rodriguez and Wen, whether taken alone or in combination, fail to teach or suggest all of the limitations of amended independent claim 21. Thus, Applicants respectfully submit that the

asserted combination of references fails to render amended independent claim 21 obvious. Each of claims 23-25 depends, either directly or indirectly, from amended independent claim 21. Accordingly, it is respectfully submitted that the cited art of record fails to render obvious these dependent claims for at least the above-cited reasons. “If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious.” MPEP § 2143.03, citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Applicants respectfully submit that claims 21 and 23-25 are patentable over the cited art of record and request withdrawal of the 35 U.S.C. § 103(a) rejections thereof.

C. 35 U.S.C. § 103(a) Rejection Based upon Rodriguez in view of Wen in further view of Petropolous

Claims 3, 13, 16-18, 22 and 30 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rodriguez in view of Wen, and further in view of Petropolous, et al. U.S. Patent No. 7,047,502 (hereinafter “Petropolous”).

As discussed above with respect to amended independent claim 1, neither Rodriguez nor Wen describes analyzing user and customer input to optimize a value of the paid inclusion listing or of assigning weights to the user and customer to optimize that value. Moreover, Petropolous neither cures the deficiencies of Rodriguez and Wen in this regard, nor is relied upon by the Office Action as doing so. To the contrary, Petropolous describes “displaying preview information associated with each item on a list of [search] results.” *Petropolous*, col. 2, lines 54-58.

Accordingly, it is respectfully submitted that, for at least the above-cited reasons, Rodriguez, Wen, and Petropolous, whether taken alone or in combination, fail to teach or suggest all of the limitations of amended independent claim 1. Thus, Applicants respectfully submit that

the asserted combination of references fails to render amended independent claim 1 obvious. Each of claims 3 and 13 depends, either directly or indirectly, from amended independent claim 1. Accordingly, it is respectfully submitted that the cited art of record fails to render obvious these dependent claims for at least the above-cited reasons. “If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious.” MPEP § 2143.03, citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Applicants respectfully submit that claims 3 and 13 are patentable over the cited art of record and request withdrawal of the 35 U.S.C. § 103(a) rejections thereof.

As discussed above with respect to amended independent claim 15, neither Rodriguez nor Wen discloses assigning weights to the user and customer for optimizing enhancement selection or utilizing artificial intelligence to assign those weights. Moreover, Petropolous neither cures the deficiencies of Rodriguez and Wen in this regard, nor is relied upon by the Office Action as doing so.

Accordingly, it is respectfully submitted that, for at least the above-cited reasons, Rodriguez, Wen, and Petropolous, whether taken alone or in combination, fail to teach or suggest all of the limitations of amended independent claim 15. Thus, Applicants respectfully submit that the asserted combination of references fails to render amended independent claim 15 obvious. Each of claims 16-18 depends, either directly or indirectly, from amended independent claim 15. Accordingly, it is respectfully submitted that the cited art of record fails to render obvious these dependent claims for at least the above-cited reasons. “If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious.” MPEP § 2143.03, citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Applicants

respectfully submit that claims 16-18 are patentable over the cited art of record and request withdrawal of the 35 U.S.C. § 103(a) rejections thereof.

As discussed above with respect to amended independent claim 21, neither Rodriguez nor Wen teaches or suggests determining the type of display device associated with a user's computing device and rendering search results based on display constraints associated with that display device. Moreover, Petropolous neither cures the deficiencies of Rodriguez and Wen in this regard, nor is relied upon by the Office Action as doing so.

Accordingly, it is respectfully submitted that, for at least the above-cited reasons, Rodriguez, Wen, and Petropolous, whether taken alone or in combination, fail to teach or suggest all of the limitations of amended independent claim 21. Thus, Applicants respectfully submit that the asserted combination of references fails to render amended independent claim 21 obvious. Each of claims 22 and 30 depends, either directly or indirectly, from amended independent claim 21. Accordingly, it is respectfully submitted that the cited art of record fails to render obvious these dependent claims for at least the above-cited reasons. "If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." MPEP § 2143.03, citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Applicants respectfully submit that claims 22 and 30 are patentable over the cited art of record and request withdrawal of the 35 U.S.C. § 103(a) rejections thereof.

D. 35 U.S.C. § 103(a) Rejection Based upon Rodriguez in view of Petropolous

Claims 31 and 32 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rodriguez in view of Petropolous.

Independent claim 31, as amended herein, recites in part, “generating an enhancement component matrix, wherein the enhancement component matrix includes a plurality of rows, each of the plurality of rows corresponding to a paid inclusion listing, and a plurality of columns, each of the plurality of columns corresponding to an enhancement option.” Applicants are unable to find any disclosure in Rodriguez of generating an enhancement matrix that includes the features as recited in amended independent claim 31. Furthermore, Petropolous neither cures the deficiencies of Rodriguez in this regard, nor is relied upon by the Office Action as doing so.

Accordingly, it is respectfully submitted that, for at least the above-cited reasons, Rodriguez and Petropolous, whether taken alone or in combination, fail to teach or suggest all of the limitations of amended independent claim 31. Thus, Applicants respectfully submit that the asserted combination of references fails to render amended independent claim 31 obvious. Claim 32 depends directly from amended independent claim 31. Accordingly, it is respectfully submitted that the cited art of record fails to render obvious this dependent claim for at least the above-cited reasons. “If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious.” MPEP § 2143.03, citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Applicants respectfully submit that claims 31 and 32 are patentable over the cited art of record and request withdrawal of the 35 U.S.C. § 103(a) rejections thereof.

**CONCLUSION**

For at least the reasons stated above, claims 1-25 and 27-32 are in condition for allowance. Applicants respectfully request withdrawal of the pending rejections and allowance of the claims. If any issues remain that would prevent issuance of this application, the Examiner is urged to contact the undersigned – 816-474-6550 or [twilhelm@shb.com](mailto:twilhelm@shb.com) (such communication via email is herein expressly granted) – to resolve the same. It is believed that no fee is due, however, the Commissioner is hereby authorized to charge any amount required to Deposit Account No. 19-2112.

Respectfully submitted,

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